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A1 38. (New) Actuating unit for an electromechanically actuated disc brake for automotive vehicles that is mounted to a brake caliper in which two friction linings are arranged to slidably interact with each one lateral surface of a brake disc, wherein one of the friction linings is movable into engagement with the brake disc by the actuating unit directly by means of an actuating element and the other friction lining is movable into engagement with the brake disc by the effect of a reaction force generated by the brake caliper, wherein the actuating unit comprises:

an electric motor,

a reducing gear engaged with the electric motor,

a freewheel mechanism coupled to the electric motor, wherein the freewheel mechanism is configured to exert a binding effect on a bearing which supports the motor rotor thereby preventing rotation movement of the bearing. CA

39.(New) Actuating unit as claimed in claim 38, wherein the freewheel mechanism along with the bearing forms a subassembly. Z

40.(New) Actuating unit as claimed in claim 39, wherein both an outside ring and an inside ring of the bearing are extended on one side in such a fashion that they enter into a form-locking engagement with the clamping element of the freewheel mechanism. J

41.(New) Actuating unit as claimed in claim 40, wherein the inside ring of the bearing has a profile which permits a form-locking accommodation of the clamping element, and the outside ring has at least one radial recess and a subsequent slope or ramp which, along with the profiling, defines at least one clamping slot in which the clamping element is received. 38+41  
+45  
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42.(New) Actuating unit as claimed in claim 41, wherein the clamping element is biased in the direction of the radial recess by means of a spring element. S

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43.(New) Actuating unit as claimed in claim 42, wherein the spring element is configured as a circlip. *not defined*

44.(New) Actuating unit as claimed in claim 42, wherein the spring element is configured as a leaf spring.

*Al unit*  
45.(New) Actuating unit as claimed in claim 38, wherein the freewheel mechanism is operable by means of an electromagnet. *8 X*

46.(New) Actuating unit as claimed in claim 45, wherein the electromagnet includes of an electromagnet and a tappet which is movable into a force-transmitting engagement with (the clamping element.) *9 X*

47.(New) Actuating unit as claimed in claim 46, wherein the electromagnet is designed as a bistable electromagnet. *10 103*

48.(New) Actuating unit as claimed in claim 40, wherein the clamping element is designed as a jamming roller. *11*

49.(New) Actuating unit as claimed in claim 40, wherein the clamping element has the shape of a ball. *12*

50.(New) Actuating unit as claimed in claim 38, wherein the bearing is designed as a ball bearing, a needle bearing, or a roller bearing. *X 13*

51.(New) Actuating unit as claimed in claim 38, wherein a second reducing gear is provided between the electric motor and the reducing gear. *X 14*

52.(New) Actuating unit as claimed in claim 51, wherein the electric motor, the first reducing gear and the second reducing gear are designed as at least two independent subassemblies. *X 15*

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53.(New) Actuating unit as claimed in claim 51, wherein the electric motor, the first reducing gear and the second reducing gear are designed as one subassembly.

54.(New) Actuating unit as claimed in claim 38, wherein the first reducing gear is configured as a ball-and-thread drive assembly.

55.(New) Actuating unit as claimed in claim 38, further including an actuating element disposed between the reducing gear and one of the disk brakes,  
wherein the actuating element is formed by (the threaded nut) of the ball-and-thread drive assembly.

56.(New) Actuating unit as claimed in claim 51, wherein the second reducing gear is arranged on a side of the electric motor remote from the brake linings.

57.(New) Actuating unit as claimed in claim 51, wherein the second reducing gear is configured as a planetary gear.

58.(New) Actuating unit as claimed in claim 57, wherein the second reducing gear is configured as a planetary gear with stepped planet wheels.

59.(New) Actuating unit as claimed in claim 55, wherein a guide member is provided which embraces (the threaded nut) of the ball-and-thread drive assembly, which is supported on a gearbox case that accommodates the ball-and-thread drive assembly, and on which (the threaded spindle) is axially supported.

60.(New) Actuating unit as claimed in claim 59, wherein the axial support of the threaded spindle is carried out by means of a radial collar.

61.(New) Actuating unit as claimed in claim 59, wherein force-measuring elements are provided on the guide member.

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62.(New) Actuating unit as claimed in claim 59, wherein an elastic seal is interposed between the threaded nut and the guide member. 25

63.(New) Actuating unit as claimed in claim 57, wherein a sun wheel of the planetary gear is designed on the rotor, while the planet wheels are mounted in a planet cage that is in a force-transmitting connection with the threaded spindle and are comprised of each one first planet wheel of large diameter that is in engagement with the sun wheel and each one second planet wheel of small diameter that is in engagement with a ring gear. 26  
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64.(New) Actuating unit as claimed in claim 63, wherein the ring gear of the planetary gear is formed of an internal toothing in a cover which represents a case of the planetary gear and is mounted on the casing of the electric motor. 27

65.(New) Actuating unit as claimed in claim 63, wherein the transmission of force between the planet cage and the threaded spindle is effected by means of a form-locking plug coupling. 28

66.(New) Actuating unit as claimed in claim 63, wherein the planet cage is mounted in the cover by means of a radial bearing. 29

67.(New) Actuating unit as claimed in claim 63, wherein the form-locking plug coupling is connected to the planet cage in a torsion-proof, radially yielding and flexible fashion. 30

68.(New) Actuating unit as claimed in claim 59, wherein the threaded spindle is of a multi-part design. 31

69.(New) Actuating unit as claimed in claim 55, wherein the threaded nut at its end remote from the first friction lining includes a projection which is movable into abutment with a stop that is provided on the threaded spindle and acts in a circumferential direction. 32